

Notice of Allowability	Application No.	Applicant(s)	
	10/733,952	BULTAN ET AL.	
	Examiner	Art Unit	
	Edan Orgad	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/10/03.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☒ The drawings filed on 10 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

DETAILED ACTION

Allowable Subject Matter

Claims 1-13 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claims 1, 6 and 10, the prior art of record teaches a digital receiver for multi-carrier signals where a RAKE receiver locates the position of channel paths and tracks them individually by assigning a code tracker for each path. Furthermore, the prior art of record teaches coping with mobile unit's motion requiring signal processing with less frequent updates and with lesser time resolution. However, the prior art of record, neither alone or in combination fail to specifically disclose in a receiver, generating a training sequence corresponding to a given cell parameter; correlating extracted data samples with the training sequence over different lags to locate the position of the first significant path which defines the beginning of the frame. Then accumulating the correlated data N times, where each time is an offset apart from the previous time which produces an accumulation vector. From the accumulation vectors, determining the most significant path value that is the largest value and calculating a frame synchronization correction value based on the difference between the first significant path position and the frame offset and adjusting the frame synchronization based upon the frame synchronization correction value.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

Art Unit: 2684

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2004/0252668 Code division multiple access (CDMA) communication system.

US 2004/0190603 Space time transmit diversity for TDD/WCDMA systems.

US 2004/0184570 Method and apparatus for reducing interference within a communication system.

US 2004/0114560 Wireless network adapted to transmit channel side information and method thereof.

US 2004/0071198 Code detection.

US 2004/0057506 Code tracking loop with automatic power normalization.

US 2003/0210750 Multiple input, multiple output system and method.

US 2003/0179698 Method and system of interference cancellation in multi-cell CDMA systems.

US 2003/0153360 Method and apparatus for transmit pre-correction in wireless communications.

US 2003/0142764 Single chip VLSI implementation of a digital receiver employing orthogonal frequency division multiplexing.

US 6,650,694 Correlator co-processor for CDMA RAKE receiver operations.

Art Unit: 2684

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edan Orgad whose telephone number is 703-305-4223. The examiner can normally be reached on 8:00AM to 5:30PM with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edan Orgad



January 21, 2005


NAY MAUNG
SUPERVISORY PATENT EXAMINER